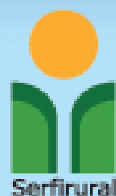
Agricultural Value Chain Finance



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AGRICULTURAL VALUE CHAIN FINANCE

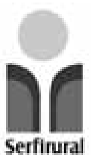
Rodolfo Quirós
Editor

Summary of the conference

“Agricultural Value Chain Finance”

Costa Rica - May 16-18, 2006

DESARROLLO RURAL SOSTENIBLE DE CENTROAMÉRICA
UNIDAD REGIONAL DE ASISTENCIA TÉCNICA



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Members of the seminar organizing committee were:

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Calvin Miller
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RUTA
Miguel Gómez

Academia de Centroamérica
Rodolfo Quirós
María Castro

The committee also drew on valuable suggestions by Mark D. Wenner of the Inter-American Development Bank, Mario Castejón, a FAO officer working with RUTA, Grettel López, of the Academia de Centroamérica and Alan Bojanic, FAO Representative in Costa Rica. The event was managed and run by the Academia de Centroamérica, whose staff and many external supporters generously lent their creativity and knowledge to make the activity a success. Rodolfo Quirós was in charge of summarizing and editing transcripts, and María Castro managed the publication process. Claudio González-Vega and Pilar Picado were particularly helpful in reviewing the summaries. Elizabeth M. Lewis translated the Spanish edition.

The event was attended by a large number of participants, most of them from Central America, as well as México, the United States, South America and Europe, as can be seen in Appendix 1. Participants learned much from the extensive knowledge and experience shared by the nearly 40 specialists (Appendix II) who were on hand for the two days of plenary sessions. The detailed program can be found in Appendix III. On the third day of the seminar, participants left the meeting venue on separate field trips to visit leading Central American companies operating in well established agricultural value chains: a diary processor and exporter (Cooperativa de Productores de Leche Dos Pinos) and a coffee processor and exporter (Coopedota). The organizers would like to thank these two cooperatives for their valuable explanations and the warm welcome they extended to participants.

The opinions, recommendations and conclusions contained herein are those of the speakers and participants, and do not necessarily reflect the views of the sponsors.

Preface

This document is a collection of presentations and discussions that took place in the "Agricultural Value Chain Finance" international seminar organized by the Food and Agriculture Organization of the United Nations (FAO), RUTA and the Academia de Centroamérica and held in San José, Costa Rica from May 16 to 18, 2006.

The concept of "agricultural value chain" covers the full range of activities and participants involved in moving agricultural products from the farmer's field to the consumer's table. Participants in this chain need money to carry out their activities. Although they often turn to traditional financing institutions, rural producers, processors and retailers are receiving increasingly large injections of resources from other entities with which they maintain trade ties. These flows of credit and financing among the various links in the chain comprise what is known as "value chain financing." The objective of the seminar, organized by the FAO, was to learn more about practical experiences with these models and approaches to value chain finance in many countries.

Businesses active in the agricultural sector (including producers, processors, marketers and exporters) met together with technical assistance providers and financial institutions to discuss this subject. The seminar provided a unique opportunity for dialogue, with participants sharing and obtaining information on best practices for linking chains together as a means to increase the supply and efficiency of financial services for rural producers, marketers and processors.

This document summarizes the main ideas discussed throughout the seminar and shares lessons learned by participants and organizers. It should serve as a source of inspiration for officers, leaders and practitioners in the area of agriculture and finance, extension agents, and in general,

all the people in institutions that provide financing or other types of support to agricultural chains. It also targets businesses in both the agricultural and financial sectors, encouraging them to learn from financing models and ideas advanced by other businesses like theirs.

Eva Gálvez Nogales

February 2007

Introduction

Claudio González-Vega

Agriculture in developing countries, all over the world, is experiencing profound, fast-moving changes. Latin America has not escaped these transformations. Globalization, although advancing more rapidly in some countries than others, has hastened the transition from traditional, low-productivity agriculture toward a modern, high-productivity agricultural sector. The resulting processes of structural change are having profound consequences for employment, the methods of generating income, risk management, poverty alleviation, and the well-being in rural households in these countries.

Consumer demand in industrialized countries is raising the bar for food quality and safety. The trend among consumers, who have ample purchasing power and little spare time, is to purchase precooked foods and prepared fresh fruits and vegetables. This means that many products acquire considerable value added in their trek from farm to table. Although modern farmers stand to earn considerably more income from these transformations, they also see a shrinking share in the final price, losing ground to those who provide processing, logistics support, and marketing.

Competition is fierce at the final stages of these market processes, and it demands sustained competitiveness by every participant in the value chain. In these days of dizzying change, when a new business rival could appear on the scene at any moment or in any corner of the world, successful farmers must constantly acquire new skills and knowledge. The need to learn, to obtain information and to compete drives every actor in the chain to build closer linkages with other actors and generates new demands for financial services.

The upper and middle classes in several Latin American countries have kept up with the times, demanding new features of color, size and flavor, as well as safety and consistency in the supply of fresh fruits and vegetables and other agri-food products. Local supermarket chains, increasingly allied with transnational chains, have responded to these new demands by introducing their own food processing and storage systems, dramatically changing traditional market linkages and replacing spot purchases with explicit and implicit longer-term contracts. At the same time, seizing their clear

comparative advantages, modern export agroindustries in Latin American countries are supplying supermarket chains in higher income countries through similar contractual arrangements, both local and international.

As Shwedel indicates in the first chapter of this book, independent farmers, faced with dramatic price risks, will eventually become broken links in fragmented chains, unable to survive competition or remaining forever in poverty. With the onset of structural transformation and the transition to modernized globalization, today's markets require integrated systems of differentiated production in which farmers, processors and marketers work interdependently. These producers can become and remain competitive if they have modern, well-organized chains and dynamic, flexible financial services.

This book examines the transformation of agriculture, the consolidation of agri-food chains, and new trends in financial intermediation, identifying the ways these processes interact. Fast-moving transformation processes of the kind many countries are experiencing pose three types of questions:

1. Are financial systems in Latin American countries prepared to meet the new demands for financial services arising from the growth of modern agri-food value chains? Will financial intermediaries be equipped to meet these demands and support the rapid growth of production and productivity triggered by the opportunities of globalization? These questions point to the influence of financial deepening on the success of chains. To what extent will the success of the chains depend on progress in rural financial deepening in these countries?

2. How much will the transformation of agriculture and the development of modern value chains shape the processes of financial deepening and the ability of financial intermediaries to meet the resulting demands? Does the development of agri-food chains contribute new means of support for modernizing and deepening the financial system? This question points to the influence of value chains on the very processes of financial deepening. How much will the development of chains and the emergence of contractual relationships among the various actors benefit a country's financial development? How much do the answers to the first challenge, described in paragraph 1, interact with the answers to this second challenge?

3. Will the supply of financial services that develops in response to these processes benefit all kinds of farmers? Which will be included, and which may not be? How much will traditional financial systems be able to facilitate the incorporation of small- and medium-scale farmers into modern agri-food chains? Will the lack of access to financial services become an insurmountable barrier to entry for many traditional farmers? What financial service options will be available to producers who are not served by formal financial service providers? This question points to the interaction between access to financial services and the incorporation of smaller producers into modern value chains.

The seminar "Financing Agricultural Value Chains" provided a remarkable mix of answers to these questions, marked by considerable **heterogeneity**. Presentations given by practitioners seem to suggest that "each case is unlike any other" in its specificity. In general, the presentations contained

a great wealth of experiences. In their papers, analysts suggested that "initial conditions" are very important. This reflects the complexity of relationships between producers, chains and financial intermediaries and the multiplicity of potential solutions to the challenges they face.

Heterogeneity matters at a number of different levels. At the first level, differences in initial conditions in the different countries reflect many kinds of diversity. For example, the countries report varying degrees of progress in increasing agricultural productivity, diverse levels of consumer income and preferences, and financial systems with varying degrees and patterns of development. These differences, in turn, reflect both the geographic conditions and the factor endowments that determine comparative advantages for certain types of products. They reflect cultural and historical determinants that shape the organization of production, and they respond to varying degrees of emphasis placed on developing human capital and on building infrastructures and institutions to facilitate communication and specialization. Finally, these differences are the result of dissimilar approaches to public policy and intervention in financial and non-financial markets.

Most visible are the differences between large countries (México, Brazil) and the smallest countries. In larger countries, the state has frequently, although not always successfully, taken the initiative in providing several types of usually subsidized credit for the activities it considers of high priority. Even though some of these programs have been in effect for a long time, it was not until very recently that they began to adopt the chain perspective. Despite their relatively long history, they have not prevented the perpetuation of a dual structure in agriculture, where large corporations with access to international financial markets continue to coexist alongside small subsistence farmers lacking access to even the most basic financial services.

Meanwhile, in some of the smaller countries, where fiscal constraints preclude such interventions, a greater variety of bold and often successful experiments have flourished in the hands of private entities (banking and nonbanking intermediaries) and nongovernmental organizations (NGOs). Such experiments have proved their mettle as equivalent or parallel to the most advanced microfinance developments in these countries. Some of them have engendered partnerships and alliances between nontraditional organizations and commercial banks, whether incubated locally or promoted by market developers in the terms described by Wenner in Chapter 2. The financial systems in these countries stand to benefit when a multiplicity of stakeholders, including modern value chains, all take readings of the signals about the risks encountered in financial and non-financial markets.

The second level where heterogeneity is important is in the diverse degrees to which different chains are organized. The book does not look deeply into the question of why some chains become consolidated, while others face chronic difficulties; but it is clear that the best organized chains are more successful at gaining access to financing for all their participants as a result of positive externalities among them. They also exercise a more favorable impact on the development of the financial markets where they operate.

The third level where heterogeneity is important has to do with the products themselves, as product characteristics often determine the difficulty of consolidating chains and gaining access to financial

services. It is no coincidence that in the case of Hortifruti (as reported by Cavallini in Chapter 4), alliances in the rice sector have developed with relative ease among producers, processors, buyers, supermarket chains and banks, while the process has been more thorny for vegetables. This particular company has won admiration for its success even with more difficult products. Product characteristics and the marketing system strongly condition the counterbalanced risks of production and market conditions (as Romero emphasizes in Chapter 4) and, through these levels of risk, they shape opportunities to consolidate the chain and gain access to financing.

The book reviews all these topics and introduces innovative conceptual frameworks, useful lessons, a wealth of experiences and valuable conclusions. The first three chapters are closely interwoven. Chapters 1 and 3 offer an optimistic counterpoint to the relative pessimism of Chapter 2 on the capability of banks and institutional financial intermediaries to handle today's challenges.

In Chapter 1, Shwedel approaches organized value chains as a new business model in a globalized world. As any good banker would do, he quickly concludes that the main challenge lies in complex risk assessment skills. He emphasizes commercial risk above agronomic risk, which until now had attracted the most attention. Shwedel examines the different risks that come into play when various links in the agri-chains demand financial services, and he concludes that the only proper perspective is to take a comprehensive view of risk all along the chain. Urging all stakeholders, including authorities, to adopt the perspective of the product chain, he acknowledges that development banks have failed to manage these risks. Their failure arose primarily from attempts by development banks (especially in México) to base financing "on the quality of the subsidy rather than the quality of the business." When banks decided to finance with a chain perspective, they begin to see and understand the business in its entirety. Risk management requires thorough knowledge of the chain.

In Chapter 2, Gálvez and others describe the great variety of financial arrangements found in numerous countries and agri-food chains, featuring varying degrees of formality and informality. As Chalmers also recognizes, many actors in the chain demand and supply different types of financial services, resort to more than one source of such services both inside and outside the chains, and very often find their legitimate needs unmet. One of the chief concerns is the degree to which existing arrangements bar entry to the smallest producers and those living in remote areas. In Chalmers' view, the holes or gaps in current lending services must be identified in order to develop new ways of responding to these unmet demands.

The authors in this second chapter focus on the unwillingness of banks to offer such services, rather than the huge difficulties these and other organizations must overcome to serve these groups. Wenner notes that banks have failed to set up branch offices in rural areas, do not offer suitable products, lack appropriate technology for developing such products, and have a distorted perception of the risks of serving marginal clienteles. Banks define their "comfort zone" for financial operations in terms of the characteristics of producers, the maturity of the chain, the degree of competition in the financial market and macroeconomic conditions. Tiffen stresses the importance of an environment in which credit contracts are respected and the temptation to forgive debts is avoided. She also

emphasizes the need to keep up with trends on financial markets by developing instruments for managing catastrophic risks, with innovations such as parametric insurance and options.

Many factors may determine an institution's willingness to serve a particular market segment. One feature that could reduce the "fear levels" among financing sources is the presence of sound linkages all along the chain –from spot transactions, the most risky, to relationship-based partnerships, investment-based partnerships, and finally, vertical integration of companies. Although chains are important facilitators of credit activities, Wenner explains that the motivation to create chains should not be financial, but rather a desire to exploit non-financial advantages of an organized chain. Without a profitable chain, credit has no significant role to play.

In Chapter 3, González-Vega explores the role of value chains in promoting rural financial deepening. He begins by acknowledging the difficulties, involving both demand and supply, facing financial transactions and the diversity of pathways that can be followed to overcome these difficulties. In challenging environments, actors forge interconnections with one another, enabling themselves to understand the risks they face and handle them more effectively. Interactions among producers, chains and financial intermediaries provide better risk-management tools, making it possible to take on the risky but more productive investments that attend the transition toward modern agriculture.

These interconnections generate a series of **virtuous circles**. It begins when a producer links into a modern chain, entering a virtuous circle of contractual relationships that progressively bring better opportunities. Second, these interconnections generate virtuous circles for the chain itself, as its competitiveness depends on the strength of its links. The third virtuous circle forms around financial intermediation as the chain "creates clients," facilitates transactions, reduces costs and increases financial intermediation profits while generating economies of scale and of scope. This makes it possible for these intermediaries to offer better services both to participants in the chain and to their neighbors. All this –better opportunities for producers, more competitiveness for the chain, and greater financial deepening– improves resource allocation and promotes a country's economic growth, especially in rural areas.

González-Vega takes an innovative view of the ways in which the consolidation of value chains facilitates producer financing. The traditional view has been that credit is supplied through interlinked contracts that bind together the different actors of the chain. In the new vision, it is not the interlinked contract that serves as a promising source of credit. Instead, the very existence of a non-financial contract makes participating farmers more creditworthy in relationships with financial intermediaries outside the chain. Instead of providing a direct credit relationship, the chain exerts an indirect influence on the producer's creditworthiness.

Chapter 3 offers a detailed description of the process of creditworthiness creation. Participation in the chain allows the **delegated screening** of borrowers, in which an explicit or implicit contract linking institutional buyers to producers provides the lenders with a go-ahead signal. Under the traditional scheme, a supermarket chain would be expected to serve as a source of credit for its suppliers, while

governments and donors would be mostly concerned about shoring up the supermarket's indebtedness ability. The experience of Hortifruti in Central America, as examined by González-Vega, shows that this is not usually the case. Under the new vision, the contract between producer and the supermarket chain triggers and expands creditworthiness in the eyes of other financial agents. Governments and donors adopting this design would seek, on the one hand, to strengthen relationships between producers and institutional buyers and, on the other. to bolster institutional financial intermediation. A deeper process of financial intermediation then provides a host of advantages that the supermarket chain alone cannot offer.

The theoretical discussion is followed by four chapters illustrating these principles with a variety of real-life experiences, from different perspectives: participants in the value chains, executives of financial institutions, suppliers of technical assistance and international cooperation agencies that offer financing. All these experiences, whether long-standing programs or new experiments, hold out lessons to be learned.

Chapter 4 describes financing experiences within agri-food chains in various countries. Cavallini relates the experience of Hortifruti, as background to the operating approach soon to be adopted by Wal-Mart Centroamérica. He particularly focuses on examples of bank financing for the production and processing of rice and beans, involving a dense network of contracts among producers, the bank, input suppliers, assembly plants and the institutional buyer. Melosevich then describes INDACO and its experience with Credinka, a rural credit union in Perú that offers "agrarian consumer loans" backed by producer associations, along with a credit card program. Arrieta discusses the Agromantaro experience with "structured financial products" to support artichoke production in Perú, by linking farmers to financial intermediaries.

Romero outlines direct and indirect financing programs that the Bounty Fresh transnational corporation offers to producers of pineapples, mango, melons and asparagus in various countries. Because this company has access to international financial markets, it clearly enjoys a better liquidity position, which enables it to meet market demands unsatisfied by local banks. In this vacuum, the trader bridges the financing gap by offering credit, but Romero looks ahead to a different kind of structure, as local financial markets deepen. Producer-trader linkages should provide the basis for gaining access to financial intermediaries. Chávez describes the contrasting experience of the Mexican para-finance agent UNIPRO, in which the chain structure provides participants with access to FIRA lines of credit.

Chapter 5 presents experiences with financial operators that use agricultural value chains to provide dynamic, innovative services with low transaction costs. Alcantara examines the experience of banking giant Banco do Brasil, with its 14,800 branches, in a country where agricultural value chains are a significant player in generating value added and exports. Banking services include the new credit card, the farm product note and support programs for farmers to enter integrated production systems. Martínez goes into the innovative experiences of Banorte in México, stressing the importance of being familiar with productive sectors, working with specialized personnel, adopting the chain approach,

diversifying the product line (including leasing), managing risk profiles and building inter-institutional coordination. Although this bank uses the full gamut of government mechanisms for financing agriculture, its commitment to the sector is not contingent on the continuation of these programs.

Zamora shares the experience of Grupo LAFISE in Central America and its comprehensive support programs for value chains, including financing, production, marketing and export. This entity provides resources by channeling them through partnerships with public and private organizations that lend technical assistance, training and institutional support to small- and medium-scale producers organized into cooperatives, guilds or associations. Corrales shares the experience of the Development Banking Division of Banco Nacional de Costa Rica (BN Desarrollo). One of this bank's success stories is its work with the Association of Small-scale Producers of Talamanca (APPTA), an indigenous area whose value chain centers around small-scale agriculture. Santana discusses the experience of several projects developed by UNCTAD, especially the land titling program for livestock growers in Colombia.

Chapter 6 describes technical assistance programs that help participants in the chain upgrade their operations, reduce risks and improve access to financial services. While some cases involve a single entity that provides technical assistance, financing and marketing, other programs focus on training in management and production skills, with no direct link to a financial institution. This section echoes a comment made by González-Vega in Chapter 3, noting that the programs help producers become more creditworthy and gain wider access to financial services. Each case study has important lessons to offer.

Flores sets forth the successful experience of Nicaragua's Fondo de Desarrollo Local. In this case, a university-based center created a microcredit institution with a rural focus, intended to fill the financing gap created by structural changes and demonstrate that credit can be taken to this sector sustainably, using methods unlike those of banks. Because the services market is imperfect, fragmented and mostly ignored by government institutions that lend technical assistance, roads and infrastructure, and because this sector must become more competitive and needs to undergo broad reconversion processes, the decision was made to offer technical assistance through strategic alliances, as described in this chapter.

Medlicott describes the experience of the Rural Economic Diversification Program (RED), a technical assistance project financed by USAID and conducted by Fintrac in Honduras, as a continuation of the successful Agribusiness Development Center (CDA). The idea is to facilitate the transition of traditional farmers toward market-led professional agriculture, with operating plans of several years' duration and the use of modern technology. The project provides technical assistance in marketing, post-harvest handling, processing, production and information technology. It has no credit fund, as its avowed specialization is not moneylending.

Torrebiarte tells the story of the "Starbucks Coffee Agronomy Company." The company understands sustainability as an integrated management program that includes premium prices for high quality,

certified and conservation coffees, access to credit, social projects, the Farmer Support Center –a regional office headquartered in Costa Rica– and a performance-based incentive program known as "C.A.F.E. Practices" that offers preferential purchases. Starbucks was interested in supporting farmer access to financing but did not wish to do so directly. It decided to invest in such organizations as Verde Ventures, EcoLogic Finance and Calvert Foundation, whose mission is to finance cooperatives of coffee growers. Although these loans are no cheaper than bank financing, they are timely and imply lower transaction costs. As González-Vega predicts in Chapter 3, the growers need only to present their Starbucks sales contract in order to qualify for credit.

Campion adds more details to the story of *Agromantaro* in Perú, already introduced in Chapter 4 by Arrieta. Artichokes are a good example of financing and technical assistance within a chain structure. When the results of this chain began to spread, other nonbanking financial entities, especially rural savings banks (*cajas rurales*), municipal savings and loans (*cajas municipales*) and *Edpyme Confianza* began to show an interest in providing direct loans to small-scale farmers. When processors found some of their own capital freed up, no longer needed for supplier credit, they began expanding their investments. Processors had some access to bank financing, but not as much as they would have liked. Collateral requirements were so stiff that company employees found themselves drawing on their personal assets to guarantee loans. Valuable lessons can be learned from this interesting case.

In Chapter 7, representatives of international cooperation institutions are given the opportunity to discuss their grant programs and other financing projects. Miller explains FAO participation in startup projects and in government-based cooperation programs. Three of the organization's working groups carry out activities associated with agricultural value chains: marketing, rural finance and farm management. Chalmers outlines activities of the United States Agency for International Development (USAID). Interventions that target financing of agricultural value chains are based on a conceptual framework that seeks to analyze and improve the entire chain, so as to create wealth in poor communities, with a focus on sustainability. Wenner and Fonseca explain the approach used by the Inter-American Development Bank, while Martínez discusses the Central American Bank for Economic Integration. Hopkins then describes the operations of the International Fund for Agricultural Development (IFAD), and Tiffen outlines the work of the World Bank and the International Finance Corporation.

In the final chapter, Wenner identifies the change of paradigm and draws conclusions from the seminar. His summary is divided into four parts: old and new realities, a bit of theory, formal practices that seem promising and the implications for different participants, whether governments, international organizations, producers or financial institutions. The reader is especially encouraged to draw on this excellent synthesis in a book that is interesting throughout.